

IMPORTANT ADDRESSES IN RUSSIA

Federal Agency of Industry

<http://www.rosprom.gov.ru/en/index.php>

The Central Research Institute named after academician A.N. Krylov, the Agency Information Resources, supported by the Russian Shipbuilding Agency (Rossudostroeniye)

<http://shipbuilding.ru/eng/about/>

TVEL Corporation consists of its major company JSC TVEL, which takes the lead within the Corporation and governs affiliated companies – enterprises of nuclear fuel cycle of Russia. The Corporation includes large Russian enterprises dealing with natural uranium mining, rendering services in fabrication, supply and scientific and engineering support of nuclear fuel operation at NPPs of Russia, CIS and foreign countries. Among them there are the manufacturers who have more than half a century production background such as [Mashinostroitelny Zavod](#) in Elektrostal, [Novosibirsk Chemical Concentrate Plant](#), [Chepetsk Mechanical Plant](#) in Udmurtia and Russia's largest uranium miner – [Priargunsky Mining and Chemical Production Association](#) and many others. JSC TVEL has Representative Offices in [Ukraine](#) and [Slovakia](#).

<http://www.tvel.ru/en/corporation/>

“Russian Engineering Company” L.L.C. (REC)

Chairman of the Board -Sergey Issakov

President -Andrei Okhotkin

Director General - Mikhail Shein

13, building 4, Cherskogo proezd, Moscow 127410, Russia

Telephone: 7 (095) 904 8200, 904 8209, 904 8245

Fax: 7 (095) 904 8222

Telex: 612378 RENK

E-mail: rec@garnet.ru

<http://www.rectrade.ru/mods.php?name=section&oid=1&bid=35>

Financial Industrial Group "Technogroup"

Financial Industrial Group "Technogroup" was established by the holding owners in October, 2000 as a sole managing body to carry out centralized corporate governance at the industrial and commercial enterprises of the holding, which do their businesses in different kinds of economics.

The management company is a copyright holder of more than 100 trademarks, patent and industrial samples. It is also part of the Counsel Committee for tax and budget of the RF State Duma.

FIG Technogroup runs its activity on the business development principles and technologies.

FIG Technogroup is a managing company of the holding enterprises which represent the following industries:

Nonferrous-metals industry:

1. ZAO Bologoe Metallurgical Works (BMW), city of Bologoe, Tver region.
2. OOO Master-Metal, Moscow

Mechanical engineering industry:

1. OAO Bologoe Reinforcement Metals Works (OAO BRW), city of Bologoe, Tver region. –
2. ZAO Trading Center of Bologoe Reinforcement Metals Works (ZAO TC BR), Moscow.

Civil engineering:

1. OOO ASK, Moscow.
2. OOO EnergyGarant-2002, Moscow.

Food industry:

1. ZAO GB Holding Wine, Moscow.

FIG Technogroup Projects.

1. Ferrous metallurgy.
2. Manufacturing of aluminum radiators
3. Manufacturing of non-pressure plastic pipes

Kulneva street, 4, Moscow, Russia, postal code 121170

Tel.: +7 (495) 737-39-10, Fax: 737-39-40

<http://www.technogroup.ru/en/contacts/>

OAO BRW

Kulneva street, 4, Moscow, Russia, postal code 121170

Tel: +7 (495) 223-08-68, Fax: +7 (495) 940-60-99

<http://www.bolarm.ru>



ZAO TC BR

Kulneva street, 4, Moscow, Russia, postal code 121170

Tel: +7 (495) 940-60-97/ 60-98/ 60-99

<http://www.bolarm.ru>



БМК ZAO BMW

Gorskaya street, 88, Bologoe, Tverskaya oblast, Russia, postal code 171081

Tel: +7 (48238) 222-04 / 251-15

<http://www.bmkom.ru>



**ХОЛДИНГ
ВИН** ZAO GB Holding Wine

Kulneva street, 4, Moscow, Russia, postal code 121170

Tel: (495) 737-85-87, Fax: 737-85-83

<http://www.moldwine.ru>

ZAO NTA Aerospaceexport

Aerospaceexport Research and Engineering Agency Closed Joint Stock Company

Aerospaceexport focuses its activities on promoting on the world market aerospace technologies, produce and services including: modernisation of existing Earth remote sensing systems, satellite navigation and geodesic support systems, ground control and data processing facilities; the design and creation of national small-satellite telecommunication systems; design, manufacture and launch into near-Earth orbits of scientific and commercial micro-satellites for both domestic and foreign customers; creation of spaceborne natural disaster warning systems, resource-surveillance, environmental monitoring and other systems; dissemination of satellite data; mapping and the generation of digital models of terrain; and, the creation of Earth remote sensing data reception, processing and archiving equipment.

Address:

7 Kitajgorodsky Drive

Moscow

Russia 109074

Email: mail@aerospaceexport.ru

Agat**Organizatsiya Agat**

Agat Organisation Federal State Unitary Enterprise

The Agat Organisation, established in 1973, is responsible for drafting proposals for space rocket hardware development. It also conducts scientific research into management and economics, primarily for the Russian Aerospace Agency. Agat makes a complex analysis of the current state and development of scientific, technological and manufacturing potential of the space industry, and examines the economic situation of this sector.

Address:

18 Butyrsky Val Street

Moscow 125047

Russia

AltEn**FGUP NPK AltEn**

Alternative Energetic Scientific and Production Complex Federal State Unitary Enterprise

FGUP NPK AltEn, has been an independent enterprise since November 1993 and specialises in the design and manufacture of onboard and ground power sources for space rocket and aviation hardware.

The main activities of FGUP NPK AltEn are: development and serial production of chemical Lithium based electric power sources for spacecraft equipment; development and serial production of Lithium based electric power sources for ground segments of rocket complexes; development and serial production of aircraft accumulator batteries; development of Lithium ion accumulator batteries; development of air Aluminum electrochemical generators.

Address:

1 Gorky Lane

Electrougli City
Moscow Region
RUSSIA 142455

Archive

RGANTD

Russian State Archive for Scientific and Technical Documentation

The Russian State Archive for Scientific & Technical Documentation (RGANTD) was established in September 1995. The archive contains a wealth of audiovisual, scientific and technical documentation on the development of the space rocket, energy production, machine-building, metallurgy, transport, communications, construction, oil and gas, consumer goods and food processing industries in Russia and the CIS countries.

Address:

82 Profsoyuznaya Street
Moscow 117393
Russia

Armatura

Armatura Design Bureau

Affiliate of FGUP M.V.Khrunichev State Research and Production Space Centre

Progenitor of the Armatura Design Bureau - the PKB design bureau - was founded in 1921 and was the designer of the first Russian automatic weapons. In 1940 it was renamed KB-2 and in 1956 transformed into the independent OKB-2. In 1960 the Design Bureau stopped working on automatic weapons and began specialising in the production of components, aggregates and systems for space-rocket hardware and special armature.

Its main activities are producing gas supply systems and pneumatic equipment for launch facilities and technical complexes; electropneumatic equipment for use in systems and aggregates of space-rocket complexes; operation of the aerodrome complex at Baikonur cosmodrome.

Address:

22 Sotsialisticheskaya St.
Kovrov City
Vladimir Region
Russia 601909

Arsenal

FGUP KB Arsenal

M.V.Frunze Arsenal Design Bureau, Federal State Unitary Enterprise

Until 1970 the Bureau worked primarily on automated naval ordinance and missile launchers, solid-fuel rocket engines and ballistic missiles. In the last 30 years the Bureau has specialised in the design, assembly and operation of Cosmos satellites. It is also involved in the design, development and operation of satellites for various purposes; the preparation and staging of scientific and technological experiments onboard the satellites; design, development of various-class space platforms; the provision of payload accommodation services and the operation of satellites.

Address:
1/3 Komsomola St.
St. Petersburg
Russia 195009

Arsenal

ОАО МЗ Arsenal

Arsenal Machine-Building Plant, Open Joint Stock Company

The major works carried out are: the development of systems and aggregates of spacecraft to enhance their reliability; and the manufacture of spacecraft and space complexes for scientific, social, economic and commercial purposes, including space complexes for radio-physical studies of the Earth's surface (territories, water basins) and physical research into propagation of radio-waves.

Address:
1-3 Komsomola St.
St. Petersburg
Russia 195009
Email: arsenal@mza.spb.ru
info@mza.spb.ru
<http://www.arsenal.net.ru>

Avangard

FGUP PO Avangard

Avangard Production Association, Federal State Unitary Enterprise

FGUP PO Avangard is a successor to the plastics factory established in 1962. In the beginning of its activity the factory was turning out plastic consumer goods and industrial articles. In 1969 the factory commenced production of large articles including the components for space-rocket hardware. Its main activities lie in the field of producing articles from fibreglass, composite materials, plastic and rubber and the production of epoxy and carbon-formaldehyde resins. The factory participates in international programmes jointly with Khrunichev State Research and Production Space Centre.

Address:
78 Oktyabrskaya St.
Safonovo
Smolensk Region
Russia 215500

Axion-Holding

ОАО Axion-Holding Izhevsk Motor Factory

Axion-Holding Izhevsk Motor Factory, Open Joint Stock Company

Axion-Holding specialises in producing articles for the Russian Aerospace Agency including onboard and ground control equipment for space-rocket complexes, special operative communication equipment and radio-technical systems, automated spacecraft docking systems, telemetry data transmission, reception, processing and storage complexes, special-purpose computers. It is also concerned with the production of industrial and technical equipment such as automated systems of control for radio-technical articles and various technological equipment that uses microelectronics.

Address:
90 M. Gorky St.
Izhevsk City
Udmurt Republic
Russia 426057
Email: postmaster@axion.udm.m

BEMZ
ОАО BEMZ

Berdsk Electromechanical Factory, Open Joint Stock Company

The Enterprise specialises in the production of spaceborne instruments, gyroscopic control devices, precision engineering, electronics and microelectronics. The Factory implements a number of technologic processes enabling it to manufacture a vast variety of produce: from various sensors to the large sections of modern linear particle accelerators. Among the best-selling consumer goods are Berdsk electric shavers.

Address:
Zelenaya Roshcha
Berdsk City
Novosibirsk Region
Russia 633190
Email: root@bamz.nsk.su

Biophizprobor
FGUP SKTB Biophizpribor

Biophizpribor Specialized Engineering Bureau , , Federal State Unitary Enterprise

This enterprise was founded in June 1955 by the USSR Ministry of Industry and Instrument-Building. In the 48 years of its existence SKTB has implemented over 900 R&D initiatives and manufactured thousands of pieces of special and general-use medical equipment. The enterprise is subordinated to Medbioextrem Federal Agency at the Russian Ministry of Health.

SKTB Biophizpribor is the prime developer, producer and supplier of cosmonaut health monitoring medical equipment and space-borne biotech experimental facilities. It is involved in scientific research into, and experimental engineering on, medical equipment for extreme-condition biology, physiology and medicine; and the design and manufacture of pre-flight and space-borne cosmonaut medical examination and health monitoring equipment.

Address:
37 Sabirovskaya St.
St. Peterburg
Russia 197183

Centre for Space Observation
FGUP Tsentr Kosmicheskikh Nablyudeny

Research Centre for Space Information Systems and Observational Technologies, Federal State Unitary Enterprise

The Research Centre for Space Information Systems and Observational Technologies is a successor to the Centre for Programme Studies (CPI). CPI was set up in 1987 and given the status of a scientific research institute in 1990. In 1995 the Centre came under the jurisdiction of

the Russian Space Agency and in 1996 it was registered as a Federal State unitary enterprise. Since 1999 it has been a leading Earth remote sensing agency in Russia and in 2000 it was renamed the Scientific Centre for Space Information Systems and Observation Technologies.

The Centre for Space Observations is involved in the design of: space information systems; UHF remote sensing equipment for the Meteor and Resource satellites, the development of orbital environment models and for improving the ecological safety of space flights.

Address:
84/32 Profsoyuznaya Street
Moscow 117810
Russia

Complex-MIT
NTTs Complex-MIT
Complex-MIT Scientific Research Centre

The Centre's current activity is focused on converting SS-25 intercontinental ballistic missiles into the mobile payload carriers of the Start family; launches and insertion of payloads into low-Earth orbits from the customer's location, if desired; and, improving payload carriers by installing proprietary hardware. Complex-MIT has participated in several international programmes such as the launch of the Israeli Eros-A1 and Eros-B1 satellites, and the Swedish ODIN satellite.

Address:
10 Beryozovaya Alley
Moscow 127273
Russia

Compomash
ОАО Корпоратива Компомаш
Compomash Corporation, Open Joint Stock Company

ОАО Компомаш Корпорация была основана для реализации государственной политики в области использования уникальных ракетно-космических технологий для производства гражданских изделий и для создания условий, необходимых для реализации эффективных инвестиционных программ.

Address:
40, 3rd Proyezd Marinoj Roshchi
Moscow
Russia 127018
Email: compomash.info@ccs.ru
info@compomash.com

Cosmodrome Baikonur
Baikonur Cosmodrome
Baikonur Federal Space Centre, Federal State Unitary Enterprise

At present Baikonur is the most intensively operated launch facility in the world; in 2002 23% of all satellite launches were made from here. Up to 60% of Russian launches are from Baikonur of which up to 90% are launches of scientific and commercial payloads and 100% are launches into geosynchronous orbit.

The main activities at Baikonur are: reception and offloading of sections of payload carriers, spacecraft, boosters and the related equipment; assembly of space rockets; autonomous and complex electric testing of payload carriers, spacecraft and boosters; pre-flight conditioning and post-flight rehabilitation of cosmonauts; spacecraft launch analysis.

Address:

7 Aviatsionnaya St.

Baikonur City

Kzyl Orda Region

Kazakhstan Republic 468320 <http://www.kbtm.ru/english/complexes/baikonur.htm>

Cosmodrome Plesetsk

First State Test Range of the Defence Ministry of the Russian Federation

In 1963 it was decided to start using the Plesetsk facilities for satellite launches. At present the cosmodrome focuses on flight tests and state trials of space rocket hardware and the assessment of its performance, and the reception, off loading and handling of the launch vehicles, their parts, boosters, payloads and the related equipment.

Address:

12 Mirny

Archangel Region

164178 Russia <http://www.kbtm.ru/english/complexes/plesetsk.htm>

Cosmodrome Svobodny

Svobodny Cosmodrome

The Second State Experimental Cosmodrome of the Defense Ministry of

The Cosmodrome is situated in the southwestern part of the Amur Region and occupies an area of 3100 km. It undertakes deployment and operation of technical and launch complexes for testing and launching Start 1 light payload carriers and spacecraft preparation; launches of defence payloads with Strela carriers, spacecraft launches within the framework of the Russian space programme, international cooperation programmes, and commercial programmes with carriers of Start and Strela families.

Address:

20 Svobodny City

ZATO Uglegorsk

Amur Region

Russia

Cosmotrans

GUP NPF Cosmotrans

Cosmotrans Scientific Research & Production Company State Unitary Enterprise

The Cosmotrans Scientific Research and Production Company State Unitary Enterprise was founded in 1996 to take responsibility for the operation and maintenance of railway infrastructure at the Baikonur cosmodrome, and for the centralized deliveries of space rocket hardware from the manufacturers to the launch sites. Today, Cosmotrans provides for the transportation of cargo and personnel, including the launch crews, around the Baikonur cosmodrome.

Address:
64 Lesnoy Prospect
St. Petersburg
194100 Russia
osn@smi.spb.su

Cryogenmash
ОАО Cryogenmash
Cryogenic Engineering, Open Joint Stock Company

From the very inception of space-rocketry Cryogenmash has been actively involved in the development and construction of test, launch, cryogenic and vacuum-cryogenic equipment for Russian space infrastructure. In cooperation with other enterprises and organisations of the Russian Aerospace Agency, Cryogenmash produces liquid hydrogen, oxygen and nitrogen for the supply of test and launch facilities including those at Baikonur and Plesetsk cosmodromes. Cryogenmash also provides cryogenic liquid storage facilities at space-rocket centres and cosmodromes; cryogenic fuel component pumping systems for test and launch facilities; numerous space environment simulators and cryogenic vacuum chambers of up to 8500 m³ for space-rocket hardware development; altitude chambers for cosmonaut training; launch-pad rocket compartment thermal stabilisation systems; and, fuel storage thermal stabilisation systems.

Address:
67 Lenina prospect
Balashikha-7 City
Moscow Region
Russia 143900,
Email: root@cryogenmash.ru
<http://www.cryogenmash.ru>

Energia
ОАО S.P. Korolev RKK Energia
S.P. Korolyov Energia Space-Rocket Corporation, Open Joint Stock Company

Founded in 1946, Energia was originally called Experimental Engineering Plant 1 (OKB-1). In 1966 it was renamed Central Design Bureau for Experimental Engineering (TsKBEM) and in 1974 it became the Research & Production Association Energia (NPO Energia). In 1991 NPO Energia was named after Academician S.P.Korolyov, before receiving its present name in 1977.

RSC Energia's main activities lie in the field of human spaceflight, ranging from the development, manufacture, testing and operation of human and cargo space transportation vehicles up to the organisation and execution of human spaceflights.

On 28 May 2005 Energia's general shareholders meeting elected Gaskom Director General Nikolai Sevastyanov as the new head of the corporation. Sevastyanov, nominated by the government, received the support of the majority of shareholders. His opponent was Energia's incumbent head Yuri Semenov, who had held this office since 1991. He was nominated by the corporation's employees, but lost against the nominee of the government.

Address:
4a Lenina St.
Korolyov City

Moscow Region
Russia 141070
Email: post@rsce.ru
<http://www.energia.ru>

Energomash

ОАО Академик В.П. Глушко НПО Энергомаш

Academician V.P. Glushko Energomash Scientific & Production Association for Power Engineering, Open Joint Stock Company

Energomash specialises in theoretic research into liquid-propellant rocket engineering; the development of powerful liquid-propellant cryogenic and non-cryogenic rocket engines for the first and second stages of payload carriers; test-bed development of liquid-propellant rocket engines, their elements and aggregates; expertise in testing fully-assembled liquid-propellant rocket engines and their separate component units; the development of the latest liquid-propellant rocket engine manufacturing technologies; and, the design and experimental development of continuously emitting lasers.

Address:
1 Burdenko St.
Khimki City
Moscow Region
Russia 141400
Email: energo@online.ru
<http://www.npoenergomash.ru>

Fakel

FGUP OKB Fakel

Fakel Experimental Design Bureau, Federal State Unitary Enterprise

Today Fakel is a leader in electric propulsion technologies and Russia's prime designer and manufacturer of low thrust ion plasma engines. The Bureau carries out the full cycle of design, development and manufacture of spacecraft electric thrusters, plasma generators, industrial thermal power generators, compact heating stations, compact autonomous boilers and agricultural equipment.

Address:
181 Moscow prospect
Kaliningrad City
236001 Russia
Email: fakel@gazinter.net

FKT Baikonur

FGUP FKTs Baikonur

Baikonur Federal Space Centre, Federal State Unitary Enterprise

FGUP FKTs Baikonur is involved in organizing cooperation between, and coordinating the activities of, the divisions and organisations of the space rocket industry involved in the operation and the infrastructure at Baikonur cosmodrome; organising cooperation between the City enterprises, military detachments and industry at Baikonur in preparation for launches of space rockets; formation of instructor groups and supervision over preparedness of space rocket units at launch sites; formation and direction of joint crews during the preparation and launch of

space rockets; organising and supervising the work of industry involved in developing new space rocket hardware at Baikonur.

Address:
42 Shchepkina St.
Moscow
107996 Russia
Email: fsc@baikonur.ru

FondServicebank OAO FondServicebank
FundServicebank, Open Joint Stock Company

FondServicebank, in cooperation with the Russian Aerospace Agency, is taking part in the financing of the Russian Federal Space Programme, the Federal Civil Aviation Development Programme and the State Armaments Programme.

Address:
8/12 Potapovsky lane Bldg. 2
Moscow
Russia 101000
Email: bank@fondservice.ru

FPSU
Federal Aerospace Search & Rescue Administration of the Russian Ministry of Defence

The Aerospace Search & Rescue Administration was set up in 1976 and given the status of a federal administrative body in 1994. FPSU provides for search and rescue of survivors in aircraft accidents, search and retrieval of cosmonauts and re-entry capsules on landing, and the airlift of emergency supplies in the aftermath of accidents, catastrophes and natural disasters all over the Russian Federation.

Address:
38a Khoroshevskoye Highway
Moscow
103160 Russia

Gagarin Centre
Yu.A.Gagarin RGNII TsPK
Yu.A.Gagarin Russian State Research & Test Centre for Cosmonaut Training

The Airforce Centre for Training of Cosmonauts (TsPK VVS) was founded in 1960. In 1968 the Centre was renamed in honour of the Earth's first cosmonaut Yuri Gagarin. In 1969 the Centre was transformed into the First Yu.A.Gagarin Scientific Research Centre for Training of Cosmonauts (1 NIITsPK) and given the status and legal rights of a first category scientific research establishment. TsPK is involved in general cosmonautic education, training of spacecraft crews, qualification heightening, training of foreign astronauts; participation in flight tests of space rocket hardware, ergonomic expertise and engineering support of spacecraft design and operation; participation in aerospace environmental monitoring and the training of experts in this field.

Address:
Star City

Moscow Region
141160 Russia
[Http://www.gctc.ru](http://www.gctc.ru)

Gascom GASCOM
GASCOM, Open Joint Stock Company

The main activities of Gascom lie in the field of building satellites, the production and delivery of payloads for communications satellites; the design and construction of ground control complexes for satellite mission control; and, the international coordination of frequency assignments.

Address
15 Kalinina St.
Korolyov
Moscow Region
Russia 141070
Email: info@gascom.ru
<http://www.gascom.ru>

Geofizika
FGUP TsKB Geofizika
Geofizika Central Design Bureau, Federal State Unitary Enterprise

TsKB Geofizika was created in 1977 to resolve tasks within the framework of the national space programme. Geofizika mainly deals with ground-based automated complexes, including those intended for the space rocket industry.

Address:
89 Kirenskogo St.
Krasnoyarsk City
660041 Russia
Email: geofizika@kras.ru

Geofizika-Kosmos
FGUP NPP Geofizika-Kosmos
Geophysics-Cosmos Research & Production Enterprise, Federal State Unitary Enterprise

Originally an optical instruments factory founded in 1850, by 1916 Geofizika-Kosmos had grown into a large company and adopted the name of Geophysics. Geofizika-Kosmos' current activities are focused on design, development and manufacture of: automatic opto-electronic sun pointers; star and planet trackers; optic and infrared visual aids for spacecraft pilotage; and radiometers, photometers, spectro-radiometers, spectrophotometers and other instruments for atmospheric studies and studies of spacecraft gas and dust envelopes.

Address:
11/17 Irkutskaya St.
Moscow
107497 Russia
Email: geokoc@Cityline.ru

Ghermes**FGUP NII Ghermes**

Ghermes Scientific Research Institute, Federal State Unitary Enterprise

The Ghermes Scientific Research Institute was originally an affiliate of the NITI 40 Institute of Technology. In 1967 it was renamed the South Urals Affiliate of Scientific Research Institute of Engineering Technologies (YuUFNIITM). Since November 1999 the Institute has enjoyed the status of Federal State Unitary Enterprise. It develops space rocket hardware manufacturing technologies.

Address:

3 Park lane

Zlatoust City

Chelyabinsk Region

456208 Russia

Email: germes@chel.sumet.ru

Impuls**FGUP NPO Impuls**

Impuls Research & Production Association, Federal State Unitary Enterprise

Impuls specialises in the creation of highly complex information and control systems including: centralised, territorially distributed, computerised control systems; information systems for automation of joint data gathering, transmission, processing, storage and retrieval by the territorially distributed organisations, services and agencies; emergency information forwarding systems; civilian and military control systems capable of functioning under emergency conditions; radiation-proof spacecraft; and nuclear plant control systems.

Address:

1 Obruchevykh St.

St. Petersburg

195220 Russia

Email: npoimpuls@peterlink.ru

Http: [//www.npoimpuls.ru](http://www.npoimpuls.ru)

Ipromashprom**ОАО Ipromashprom**

Institute for Design of Machine-Building Enterprises, Open Joint Stock Company

ОАО Ipromashprom, the leading project institute of the Russian Aerospace Agency, supplies with cost sheets and project documentation enterprises and organisations in the space-rocket industry. It is also actively involved in the design of enterprises, buildings and installations for various purposes.

The Institute drafts project and other technical documentation for construction at various phases of design, including: draft project, work project (the section subject to approval and working documentation), working documentation taking into account drafting of cost sheets, technical and economical validation of construction, validation of investments, and also various preliminary design calculations.

Address:

1 Suvorovskaya square

Moscow
Russia 127473
Email: ipmp@ipromash.ru
<http://www.ipromash.ru>

Iris

FGUP PKP Iris

Iris Production and Design Enterprise, Federal State Unitary Enterprise

Iris, founded in 1960, was called the Rostov Special Design Bureau until 1992. Since 1976 the Enterprise has been designing, manufacturing and delivering components of control systems for the technological equipment of ground-based launch facilities.

In its 40 years of existence Iris has to its credit: the development and incorporation into unique systems of automated management of the gas supply for spacecraft at Proton payload carrier launch facilities; highly reliable systems of centralised management of fuelling equipment at the Energia Buran complex; a complex of onboard technical means for control systems of space technologies under conditions of microgravity in Photon spacecraft; automated control systems for ships and steam power plants for the navy; and, control systems for hovercraft and other equipment.

Address:

9 Krasnoarmejskaya St.
Rostov on Don
344011 Russia
http://www.pkpiris.ru/index_high.html

IRZ

ОАО IRZ

Izhevsk Radio Factory, Open Joint Stock Company

IRZ mainly deals with onboard telemetry and radio-technical complexes; subscriber terminals and onboard equipment of Gonets low-orbit satellite communication systems; the Strela family of VSAT stations for corporate satellite communication networks; UHF modules, wave-guide tracts for satellite repeaters, ceramics-based micro-assemblies, low-noise amplifiers and hermetic connectors; and, the user terminals for the GLONASS satellite navigation system based on a BNP-12/10MS compact navigational receiver.

Address:

19 Bazisnaya St.

Izhevsk City
Udmurt Republic
Russia 426034
Email: disp@irz.ru

Iskra

ОАО НПО Iskra

Iskra Scientific and Production Association, Open Joint Stock Company

Iskra has a 45 years' experience in the design and manufacture of solid-fuel rocket engines, engine clusters and gas-generators for various space-rocket hardware.

Address:
28 Academician Vedeneyev St.
Perm City
Russia 614038
Email: iskra@perm.raid.ru

Istochnik

ОАО NIAI Istochnik

Istochnik Scientific Research Accumulator Institute, Open Joint Stock Company

Istochnik specialises in the design and manufacture of chemical electric current sources based on various electrochemical systems for spacecraft, terrestrial and underwater objects; scientific research, experimental engineering and technology development in the area of chemical electric current sources; the design and manufacture of equipment for production and testing of chemical electric current sources; climatic and mechanic testing; and, certification of chemical electric current sources.

Address:
10 Dalya St.
St. Petersburg
Russia 197376
Email: istochnik@peterlink.ru

IZMIRAN

Institute of Terrestrial Magnetism, Ionosphere and Radio Wave Propagation at the Russian Academy of Sciences

IZMIRAN is involved in theoretical and experimental research into the physics of ionosphere and magnetosphere, radio wave propagation, solar physics and physics of solar terrestrial nexuses, the magnetism of Earth and other planets, development of spaceborne scientific instruments, satellite measurement of electric and magnetic fields, electromagnetic radiation and populations of charged particles in the near Earth environment, and the processing and analysis of scientific data.

Address:
Troitsk City
Moscow Region,
Russia 142190
Email: kvd@izmiran.rssi.ru
<http://www.izmiran.rssi.ru>

KB TKhM

FGUP KB TKhM

Design Bureau for Chemical and Transport Engineering, Federal State Unitary Enterprise

KB TKhM has been taking part in the design, delivery and joint operation of aggregates and ground infrastructure of space rocket complexes since the early 1950s. From 1965 KB TKhM has also been the industry's prime contractor for fuelling launch vehicles, payloads and strategic missiles with non-cryogenic propellants and compressed gases in accordance with environmental and safety regulations. In 2001 KB TKhM was appointed prime contractor for liquid fuel IBM utilisation.

The Bureau is carrying out a significant amount of work for Federal and international space programmes. TKhM mainly deals with the design of rocket fuelling and compressed gas pumping equipment, the design of decontamination equipment, industrial waste disposal, environmental protection, the design of temperature and humidity stabilisation systems, and the design of launch pad gas supply and cooling systems.

Address:
32 Kirpichnaya St.
Moscow
Russia 105187
Email: kb.thm@q23.relcom.ru

KBKhA
FGUP KBKhA

Design Bureau of Chemical Automatics, Federal State Unitary Enterprise

Design Bureau of Chemical Automatics is one of the world's leading creators of liquid propellant rocket engines for military, commercial and scientific space rocket hardware. At present the Bureau is developing RD 0124, RD 0146 rocket engines, conducting feasibility studies on the GPVRD 58L engine, designing RD 0126 untraditional nozzle configuration engines, a tripropellant engine, a variable-nozzle engine and other promising new hardware.

Address:
22 Voroshilova St.
Voronezh City
Russia 394006
Email: cadb@comch.ru
<http://www.kbkha.ru/eng/1.php>

KBOM
FGUP V.P. Barmin KBOM

V.P. Barmin Design Bureau for General Engineering, Federal State Unitary Enterprise

The Special Design Bureau at the Compressor Factory was founded in 1941. KBOM specialises in the design and operation of launch facilities, space rocket ground infrastructure and in orbit processing equipment.

Address:
22 Berezhkovskaya Embankment
Moscow
Russia 121059
Email: pchela@Cityline.ru

KBSM
OAD KBSM

Special Engineering Design Bureau, Open Joint Stock Company

This Bureau is the leading creator of space-rocket launch facilities. It specialises in the solution of knowledge-intensive problems involving powerful machinery and complex metal structures, and also takes part in the construction of dish antennae for satellite communications.

Address:
64 Lesnoi Prospect
St. Petersburg
Russia 194100
Email: kbsm@mail.admiral.ru

KBTM
FGUP KBTM

Design Bureau of Transport Machinery, Federal State Unitary Enterprise

The Design Bureau of Transport Machinery was founded in 1948 to take charge of the design of launch facilities for future ballistic missiles and space rockets. Today KBTM is the leading designer of launch facilities for Cosmos, Cyclone, Zenith, Zenith 3SL, Rokot and Angara payload carriers. KBTM equipment is successfully operating at Plesetsk, Baikonur, Kapustin Yar cosmodromes and onboard the Sea Launch floating platform.

Address:
101 Vernadsky Prospect Bldg.2
Moscow
Russia 119415
Email: kbtmt@dol.ru
Http://www.kbtm.ru

Keldysh Centre
FGUP M.V. Keldysh Tsentr

M.V. Keldysh Research Centre, Federal State Unitary Enterprise

RNII, the predecessor of the M.V. Keldysh Research Centre, was founded in 1933 as the world's first scientific research institute devoted solely to rocketry. Today the Centre is the leading enterprise of the Russian Aerospace Agency in R&D on rocket engines and space-based power generation. The Centre also plays a vital role in drafting and implementing the Federal Space Programme, and renders assistance in modernising payload carriers and improving their efficiency. Before and during WWII the Centre worked on missiles and created the legendary Katyusha multiple rocket launcher.

The Keldysh Centre undertakes scientific research into rocket engineering and space propulsion; R&D on space rocket technologies, fuels and materials; development of advanced ignition systems and fuel tank thermal stabilisation systems; development of spacecraft thermal management systems; ablative and insulating shields; and the development of microwave, laser beams and in orbit and orbit to Earth energy transfer technologies.

Address:
8/10 Onezhskaya St.
Moscow
Russia 125438
Email: kerc@elnet.msk.ru
Http://www.kerc.msk.ru

Khimash (Isaev KB)
FGUP A.M.Isayev KB Khimash

A.M.Isayev Design Bureau for Chemical Engineering, Federal State Unitary Enterprise

The A.M. Isayev Design Bureau for Chemical Engineering grew out of a design department set up in 1943 by A.M. Isayev, one of the jet propulsion pioneers. Today the Bureau has designed more than 120 liquid propellant rocket engines, among them those which lifted off the Vostok spaceship with the first cosmonaut Yuri Gagarin onboard and provided for the soft landing of Lunar probes.

Khimmach is involved in the design, development and production of liquid propellant space rocket and booster engines with up to 100 tons thrust; spacecraft and station engines; monopropellant and bipropellant impulse engines with 0.5 – 250 kg thrust; and combustion chambers, turbine pumps, gas generators, pressure regulators, valves, fuel tanks and cylinders made of stainless steel, aluminum and titanium alloys.

Address:
12 Bogomolova St.
Korolyov City
Moscow Region
Russia 141070

Khimmach (NII)
FGUP NII Khimmach

Scientific Research Institute for Chemical Engineering, Federal State Unitary Enterprise

The Scientific Research Institute for Chemical Engineering is a national leader in the development of liquid propellant rocket engines and spacecraft thermal and vacuum testing in simulated orbital environment. It also conducts the theoretic and experimental research into the liquid propellant engines of all thrusts and types, and refines the methods of their test bed development.

Address:
4 Babushkina St.
Peresvet City
Moscow Region
Russia 141320
E mail :mail@niichimmach.ru
<http://www.niichimmash.ru>

Khrunichev Centre
FGUP M.V.Khrunichev GKNPTs

M.V. Khrunichev State Research and Production Space Centre, Federal State Unitary Enterprise

Khrunichev Centre is a world leader in the development, production, testing and operation of a variety of launch vehicles and spacecraft. The company was founded in 1993 on the premises of the Khrunichev Engineering Plant and Salyut Design Bureau. As the designer and manufacturer of the Proton heavy launch vehicle, Khrunichev Centre is empowered to conclude agreements on the utilisation of Proton for the commercial launch of domestic and foreign satellites. Marketing of Proton outside Russia is carried out with the help of a joint venture International Launch Services (ILS).

Among the largest projects in Khrunichev's portfolio at the moment are the Angara launcher with its light, medium and heavy-class modifications, the Yakhta satellite platform and participation in developing Earth observation and telecommunications space-based systems. Khrunichev Centre is also the owner and manager of ground infrastructure for spacecraft launches, operation

and data processing in Baikonur and Plesetsk, including launch pads, test facilities, propellant filling and neutralisation facilities, and associated transport and services.

On 25 November 2005, Alexander Medvedev, Director General of Khrunichev Space Center was dismissed, by a Decree signed by President Vladimir Putin. The Federal Space Agency had nominated Vladimir Nesterov, former Head of Launchers and Infrastructure Department at Roscosmos, to head the Center.

Address:
18 Novozavodskaya Street
Moscow
Russia 121309

Kirov Plant

FGUP S.M.Kirov Ust-Katavsky Vagonostroitelny Zavod

S.M. Kirov Ust-Katav Railway Carriage Plant, Federal State Unitary Enterprise

The S.M. Kirov Ust Katav Railway Carriage Plant, established in 1758, is one of the oldest Russian Industrial enterprises. At the end of the 19th century the enterprise had been transformed into a railway carriage plant and between 1941 and 1945 it worked on defence. In the early 1950s the Plant began to master the production of space rocket hardware along with the development of new trams and other civilian produce and consumer goods. At present Kirov Plant focuses its attention on developing and producing liquid propellant rocket engines and engine clusters for spacecraft, and the design, development and production of tram carriages.

Address:
1 Zavodskaya St.
Ust Katav City
Chelyabinsk Region
Russia 456040
Email: esvz@chel.surnet.ru

Kompozit

ОАО Kompozit

Kompozit, Open Joint Stock Company

ОАО Kompozit is a scientific research organisation for the creation and use of materials and technologies manufactured in the course of the design, serial production and operation of space-rocket hardware. It specialises in composite materials design and test, and consults the primary Russian manufacturers of satellites and rockets.

Address:
4 Pionerskaya St.
Korolyov City
Moscow Region
Russia 141070
Email: kompozit.mat@g23relcom.ru

Krasmash

FGUP Krasmash

Krasnoyarsk Engineering Plant, Federal State Unitary Enterprise

Krasmash is involved in the design, development, test batch and serial production of: space rocket hardware; liquid propellant rocket engines; DM, DM1, DM2, DM3, DM4, DM 03 boosters for Proton and Proton M launch vehicles and DM SL, DM SL 03 modules for Zenith 3SLs; R&D for missiles, rocket engines and boosters; the serial production of Cosmos engines, correction thrusters, rudder controls for launch vehicles, space rocket automata; and test-bed space-rocket hardware development.

Address:
29 Gazety 'Krasnoyarskij Rabochij' Prospect
Krasnoyarsk City
Russia 660123
Email: root@krasm.krasnojarsk.su

Kvant

FGUP NPP Kvant

Kvant Scientific & Production Enterprise, Federal State Unitary Enterprise

The Enterprise's history dates back to 1919 when the Red Army's Engineering Corps set up the production of galvanic cells and batteries for wireless communication equipment at a Kvant factory. Subsequently, around the factory grew the Photon All Union Scientific Research Institute of Electric Current Sources that became the basis of the Kvant (Quantum) Scientific and Production Enterprise.

Kvant makes: scientific studies of the conversion of solar, chemical and thermal energy into electric current; the design, development and production of solar panels and autonomous power supply systems for spacecraft and terrestrial equipment; the design, development and production of photo electric and thermo electric converters; the design and development of combined power supply systems comprising solar panels, thermo-electric generators and chemical power sources; and, the design and development of back-up chemical power sources for space rocket hardware.

Address:
16 3d Mytishchenskaya St.
Moscow
Russia 129626
Email: kvanteko@mail.cnt.ru

Kvant

OAD NPP KP Kvant

OJSC "SIE SIM Kvant" Kvant Scientific and Industrial Enterprise of Space Instrument Making, Open Joint Stock Company

NPP KP Kvant was founded as a producer of opto-electronic spacecraft orientation instruments. Since then it has designed and manufactures 26 types of sophisticated high-precision opto-electronic spacecraft orientation instruments to track the Earth, Sun and the Polar Star.

Address:
7 Milchakova St.
Rostov-on-Don
Russia 344090
Email: space@aaanet.ru

Lavochkin (NPO)**FGUP S.A. Lavochkin NPO**

S.A. Lavochkin Scientific and Production Association , , Federal State Unitary Enterprise

The S.A. Lavochkin Scientific and Production Association was founded in 1937 as an aviation enterprise. During WW2 it became the main producer of fighter planes. At present it is one of the national leaders in planning and implementing interplanetary missions, developing spaceborne information systems, Earth remote sensing, and solar and astrophysical research.

Address:

24 Leningrad Highway

Khimky City

Moscow Region

Russia 141400

Email: npol@berc.rssi.ru

Lavochkin (OKB)**FGUDP S.A. Lavochkin NPO Kaluzhskoye OKB**

Kaluga-based Experimental Design Bureau of S.A. Lavochkin Scientific and Production Association, Federal State Unitary Subsidiary Enterprise

OKB Lavochkin focuses on spacecraft control and data processing software development; design and manufacture of spaceborne scientific instruments and ground equipment for the S.A. Lavochkin Scientific and Production Association; mathematical modeling of landing impacts; design and manufacture of ozone generators and UV irradiators for clinical and industrial disinfection (Decont 2 and FUM ozonators, OV UF airflow sterilizer).

Address:

17 Oktyabrskaya St.

Kaluga City

Russia 248601

Email: kedblrpa@Kaluga.ru

Lebedev Optics**FIAN Optics Department**

Optics Department of the P.N. Lebedev Physics Institute at the Russian Academy of Sciences

FIAN Optics Department is mainly involved in the scientific study of the dynamic processes and singular phenomena in the Sun's transitional layer and corona — solar flares, plasmoid ejection, corona condensation, coronal holes, etc. — by the method of imaging X-ray spectroscopy in 1.8 – 304 Å diaphragm; the simultaneous spectroscopy of solar disc and corona in Fe, Mg, Si, He, Ne, C, O spectral lines emitting within the plasma temperature range from $-5 \cdot 10^6$ to $+5 \cdot 10^6$ Kelvin; X-ray monitoring of solar activity, warning of solar flares and their magnitude and duration; and the study of the Earth's upper atmosphere at 100 – 500 km altitudes, its temporal and latitudinal variations and their dependence on the level of solar activity through nadir measurements of X-ray absorption from low orbiting satellites.

Address:

53 Leninsky Prospect

Moscow

Russia 117924

Email: mira@sci.lebedev.ru

[Http://www.lebedev.ru](http://www.lebedev.ru)

LOMO

ОАО LOMO

Leningrad Optics and Mechanics Factory, Open Joint Stock Company

LOMO produces celestial correction and orientation instruments; visual and photographic measurement instruments for piloted space stations; space telescopes for meteorological observations and Earth remote sensing; and, equipment for the study and testing of optical instruments and space telescopes.

Address:

20 Chugunnaya St.

St. Petersburg

Russia 194044

Email: lomo-pr@peterlink.ru

Makeev (KB)

FGUP GRTs V.P. Makeyev KB

Academician V.P. Makeyev Design Bureau State Rocket Centre, Federal State Unitary Enterprise

The V.P. Makeyev Design Bureau, established in 1947 and given the status of State Rocket Centre in 1993, is the main developer of submarine-based strategic ballistic missiles. During the 1960s, on the basis of scientific, technological and organisational advancements, an independent school of naval missilery was formed headed by V.P. Makeyev. Under his direction three generations of missile complexes (8 complexes and 12 modifications), were created and commissioned into service. These formed the core of the strategic naval nuclear forces of the USSR and Russia.

Today the Bureau is taking part in the programmes of the Russian Aerospace Agency and in the launches of foreign scientific satellites. Makeyev is working on the development of the new generation of space rocket hardware; the creation of low-orbit and sub-orbital scientific and commercial craft; and, certification trials of space rocket hardware.

Address:

1 Turgoyakskoye Highway

Miass City

Chelyabinsk Region

Russia 456300

Email: sre@makeyev.ru

Mars

FGUP MOKB Mars

Mars Moscow Experimental Design Bureau, Federal State Unitary Enterprise

Mars Moscow Experimental Design Bureau is mainly involved in the design, development and production of: celestial navigation and control systems for piloted and automated spacecraft; modeling stands and simulators for hardware and software development; multi-channel high-speed failure-proof onboard computers; high-precision star trackers; ground test equipment; and local controllers for various purposes.

Address:
16 1st Shchemilovsky Lane
Moscow
Russia 103030
Email: mars.mokb@mtu net.ru

Mashinostroitel
FGUP Permsky Zavod Mashinostroitel
Perm Mashinostroitel Factory, Federal State Unitary Enterprise

The Perm Mashinostroitel Factory, founded in 1967, is a specialised producer of space rocket hardware. On the orders of the Defence Ministry the Enterprise has carried out the development and serial production of a whole range of space rocket hardware designed by the design bureau of S.P. Korolyov, M.K. Yangel, V.N. Chelomey, V.M. Gerasimenko, P.A. Tyurin, M.I. Katukov, V.P. Makeyev, L.N. Lavrov, M.I. Sokolovsky and others. The manufactured articles showed a high degree of reliability and effectiveness, confirming the high quality of goods produced by the factory. The payload carriers manufactured by Mashinostroitel launched into orbit the satellites of the international Intercosmos programme and the auxiliary separation and soft landing thrusters for the Energia-Buran space complex.

Today the Perm Mashinostroitel Factory is a powerful specialised enterprise that has at its disposal unique technological equipment and production areas to manufacture solid fuel rocket engines with the use of metallic and composite materials and auxiliary engines for flight vehicles of all types.

Address:
57 Novozvyaginskaya St.
Perm City
Russia 614014
Email: skif@permonline.ru

MEI
FGUP OKB MEI
Special Design Bureau of the Moscow Institute of Power Engineering, Federal State Unitary Enterprise

OKB MEI is working on the satellite monitoring of Earth terrain and atmosphere, trajectory control, TV systems, onboard radio electronic equipment for various spacecraft; the reception of scientific and telemetric data, the measurement of spacecraft movement parameters and the control of spacecraft conducting studies within the limits of the solar system.

Address:
14 Krasnokazarmennaya St.
Moscow
Russia 111250
Email: ka@okbmei.msk.su

MIT
FGUP MIT
Moscow Institute of Heat Technology, Federal State Unitary Enterprise

In cooperation with numerous design bureaux, scientific research institutes and factories the Institute spearheaded the development of the short- medium- and long-range solid fuel ballistic missiles: Luna and its modifications, Temp-S,Temp-2S, Pioneer (SS-20) and its modifications, Topol (SS-25) and Topol-M in stationary, silo-based and mobile variants. Today MIT works on scientific research, R&D, experimental engineering, arms production and utilisation, and the design, development, testing and launch of payload carriers and spacecraft.

Address:
10 Berezovaya Alley
Moscow
Russia 127273
Email: mitemail@umail.ru

MMZ

FGUP MMZ

Miass Machine-Building Factory, Federal State Unitary Enterprise

MMZ mainly deals with the production of hulls, upkeep and launch preparation systems, and missile telemetry systems.

Address:
1 Turgoyakskoye Highway
Miass City
Chelyabinsk Region
Russia 456320
Email: info@mmz miass.ru

MNIIRS

ОАО MNIIRS

Moscow Scientific Research Institute of Radio Communications, Open Joint Stock Company

MNIIRS is one of the leading Russian institutes specialising in the creation of space communication systems. Its main activities lie in the field of perfection and development of the United satellite communication system for the Russian Federation; repeaters with onboard signal processing and multi-beam antenna systems; high throughput satellite communication systems for moving objects; the construction of combined satellite communication channels and cellular systems; and, the development of communication systems based on relay satellites in low circular polar orbits.

Address:
32 Nizhegorodskaya St.
Moscow
Russia 109029

Motor

FGUP KB Motor

Motor Design Bureau, Federal State Unitary Enterprise

KB Motor specialises in the design of dual-purpose cosmodrome equipment falling into four major groups: space rocket transportation vehicles, launch pad erectors, assembly and interface towers, and service platforms.

Address:
7 Sergej Makeyev St.
Moscow
Russia 123100

Motostroitel
ОАО Motorostroitel
Motorostroitel, Open Joint Stock Company

Motostroitel specialises in the production of RD-107, RD-108, RD-107A, RD-108A liquid-propellant rocket engines. It participates in Air Launch and Aurora prospective projects relying on NK-33 and NK-43 engines, the construction of modular power-plants on the basis of NK-14E and NK-37 engines, and the production of NK-12ST, NK-14ST, NK-36ST gas-pump drives.

Address:
29 Zavodskoye Highway
Samara City
Russia 443009
Email: marketing@motor-s.ru
<http://motor-s.ru>

NII KP (Moscow)
FGUP NII KP
Scientific Research Institute of Space Instrument Engineering, Federal State Unitary Enterprise

NII KP primarily deals with the creation of space rocket hardware, complex engineering systems, and special purpose and civilian equipment. The Institute has taken part in most Soviet and Russian space programmes. Today it is one of the leading enterprises in the Russian space rocket industry.

Its main activities are: state ordered R&D on space rocket hardware and complex engineering systems, both special purpose and civilian; the design, development and serial production thereof; producer supervision and operational support; and R&D on terrestrial and satellite communications systems, satellite navigation, positioning, distress signal relay systems, telemetry and information technologies, automated and piloted spacecraft, interplanetary probes, resource surveillance and environmental monitoring satellites.

Address:
53 Aviamotornaya St.
Moscow
Russia 111250
Email: fgupniikp@mtu.net.ru

NII KP (St. Petersburg)
FGUP NII KP
Scientific Research Institute of Control Instruments, Federal State Unitary Enterprise

NII KP's current activity focus is on the design, development and manufacture of gas and fluid-floating gyroscopes, momentum wheels and spacecraft orientation systems on their bases; the development of pre-spin calibration techniques and automatic initial positioning procedures; and the design, development and manufacture of celestial correction systems and the compilation of star catalogues.

Address:
16 Tramvajny Prospect
St. Petersburg
Russia 198216
Email: info@niikp.spb.ru

NII KS

NII KS – Affiliate of M.V.Khrunichev GKNPTs

Scientific Research Institute of Space Systems Affiliate of M.V. Khrunichev State Research & Production Space Centre

NII KS is involved in the design, development, testing and operational support of space hardware including that commissioned by the State Industrial Supervision Agency (Gostekhnadzor), the State Energy Production Supervision Agency (Energonadzor) and the State Nuclear Safety Agency; R&D on prospective hardware and advanced technologies; R&D on special purpose hardware and systems; feasibility studies for space projects; development of specialised control systems, data acquisition and processing systems and related software; development of Earth remote sensing systems for monitoring natural resources, and, key economic infrastructure and hazardous objects.

Address:
36 Tikhonravova St.
Yubilejny City
Moscow Region
Russia 141091
Email: niiks@khrunichev.com

NII Parachutostroeniya

FGUP NII Parashutostroyeniya

Scientific Research Institute of Parachute Engineering, Federal State Unitary Enterprise

NII Parachutostroeniya is mainly involved in the design, development, testing and manufacture of parachute systems intended for: soft landing of manned re-entry capsules; landing of unmanned re-entry capsules; booster recovery; deceleration, descent and landing of interplanetary probes.

Address:
2 Irkutskaya St.
Moscow
Russia 107241

NII PM

FGUP Academician V.I. Kuznetsov NII PM

Academician V.I. Kuznetsov Scientific Research Institute of Applied Mechanics, Federal State Unitary Enterprise

NII PM is a leading developer of gyroscopic instruments and inertial navigation systems for space rocket hardware. It focuses on gyroscopic instruments and inertial navigation systems for rockets, spacecraft, aircraft and ships; micro-mechanical accelerometers and gyroscopes; navigation systems on their bases; and, miniature robotic devices including remotely-controlled observational micro-drones.

Address:
55 Aviamotornaya St.
Moscow
Russia 111123

NII PP and SPT

NII PP & SPT

Scientific Research Institute for the Food Concentrate Industry and Specialised Food Technology
at the Russian Academy of Agricultural Science

In 1961 NII PP and SPT became involved into space programmes. Since 1975 the Institute has been the country's leading developer and supplier of concentrated foods for the crews of spaceships and stations.

Address:
32 Miklukho-Maklaya St. Bldg. 1
Moscow
Russia 117279

NII TP

FGUP NII TP

Scientific Research Institute of Precision Instruments, Federal State Unitary Enterprise

NII TP specialises in the design and manufacture of: spacecraft automated control systems; radar range-finders for spacecraft mutual approach and docking; Earth remote sensing data reception, processing and dissemination systems; air-borne and space-borne radars; radio equipment for low-orbit satellite communication systems; development of Earth remote sensing observation scheduling and data processing technologies.

Address:
51 Dekabristov St.
Moscow
Russia 127490

NIIEM

FGUP NIIEM

Scientific Research Institute of Electro mechanics, Federal State Unitary Enterprise

NIIEM's main activities are: the design, development, manufacture and launch of Earth remote sensing satellites and satellites for the study of solar and terrestrial nexuses and the Earth's ionosphere; the design, development and manufacture of spacecraft orientation and stabilisation systems; kinetic moment dumping systems; orbit correction systems; precision instrumentation management systems; radiation coolers, heat pipes and thermal control systems; and, integrated onboard control systems and automated test facilities.

Address:
Istra City
Moscow Region
Russia 143500
Email: niiem@istranet.ru

NIIFI**FGUP NIIFI**

Scientific Research Institute of Physical Measurements, Federal State Unitary Enterprise

NIIFI mainly deals with the design, development, production and delivery of physical parameter measurement instruments, normalising converters for them, and the measurement, diagnostics, control and fault protection systems for spacecraft and launch facilities. The product range includes acoustic pressure, differential pressure, force, deformation, relative coordinates, linear and angular movements, linear and angular accelerations, rotation period, gas composition and other sensors of absolute, excessive or rapidly variable parameters. The Institute's sensors are notable for their accuracy, insensitivity towards extremes of temperature, shock, vibration, acoustic loads, radiation and other adverse factors, long service lives and meteorological stability.

Address:

8/10 Volodarsky St.

Penza City

Russia 440026

Email: niifi@sura.ru

[Http://www.niifi.sura.ru](http://www.niifi.sura.ru)

NIKhSM FGUP NIKhSM

Scientific Test Institute for Chemical and Civil Engineering, Federal State Unitary Enterprise

NIKhSM focuses on test-bed development of launch facilities; research into take-off gas dynamics on full- and medium-scale models; ballistic studies, studies of aerodynamic stability and high-speed airflow.

Address:

Remmash Town

Sergiyev Posad District

Moscow Region

Russia 141336

NIIMash**FGUP NIIMash**

Scientific Research Institute of Machine-Building, Federal State Unitary Enterprise

Since 1981 NIIMash has been the industry's leader in the design and manufacture of low-thrust liquid-propellant engines for automated and piloted spacecraft. It also leads the way in the test firing of up to 3000 kN hydrogen-oxygen sustainer engines.

In 1970 correction thrusters designed and manufactured by the Institute were installed in the world's first Salyut orbiting space station. The low-thrust liquid-propellant engines remain the Institute's core competence. To date it has created more than 30 types and they have performed faultlessly onboard Salyut, Almaz and Mir orbiting space stations, Quantum, Crystal, Spectrum, Priroda extension modules, Soyuz, Soyuz-TM piloted spaceships, Progress cargo ships, Buran space shuttle, Cosmos and Yantar spacecraft, Breeze booster and Rokot payload carrier. Now the

Institute's thrusters onboard Zarya and Zvezda modules are used to correct the orbit of the ISS. On the basis of these, thrusters have also been developed for the engine of the Molniya spacecraft.

Address:
72 Stroitelej St.
Sverdlovsk Region
Nizhnyaya Salda City
Russia 624740
Email: Niimash@r66.ru

NIIPP

FGUP NIIPP

Scientific Research Institute of Precision Instrument Engineering, Federal State Unitary Enterprise

NIIPP is involved in the design, development and manufacture of: space-borne and ground-based wide band laser and radio-optic data transmission systems; laser spacecraft approach and docking guidance systems including those for ISS; opto-electronic sights, laser range-finders; air-borne, space-borne and ground-based multi-band atmospheric & near-space flash detectors; precision laser satellite trajectory measurement systems for the Russian quantum-optic station network in the interests of the United GosNAKU and SKKP; ground-based quantum-optic systems for monitoring and control of dormant and failing satellites in the interests of the United GosNAKU and SKKP; and, quantum-optic infrared missile and aircraft test equipment;

Address:
53 Aviamotornaya St.
Moscow
Russia 111250
Email: 8424.g23@g23.relcom.ru
natali@ricimi.msk.su

NIIR

FGUP NIIR

Radio Scientific Research Institute, Federal State Unitary Enterprise

NIIR specialises in the design, development and installation of satellite communication systems, satellite radio and TV broadcast systems, satellite direct TV broadcast systems; design, development & installation of ground reception stations, satellite transponders, transponder control and test equipment; and, frequency band and geostationary orbital slot allocation at national and international levels. The Institute is an authorised centre for certification trials of ground reception stations, transponders, and satellite communication and broadcast systems.

Address:
16 Kazakova St.
Moscow
Russia 103064
Email: info_niir@mail.ru

NIIT

FGUP NIIT

Scientific Research Institute of Television, Federal State Unitary Enterprise

In 1958 the Institute began designing television systems for space exploration. It was the Institute's photo and TV cameras that in 1959 took the world's first images of the backside of the Moon. Thenceforth the Institute designed a whole range of TV equipment to link the crews of piloted spaceships and stations to mission control centres, including a colour TV system that transmitted the pictures of the 1975 joint flight of Apollo and Soyuz spaceships. Today the Institute is Russia's leading designer and manufacturer of television equipment.

Address:
22 Polytechnicheskaya St.
St. Petersburg
Russia 194021
Email: niit@infos.ru

NII TM

ОАО НИИ ТМ

Scientific Research Institute of Precision Machinery, Open Joint Stock Company

NII TM is involved in the design and production of control systems for robotic complexes of Earth surface observation and multiple delivery of information on the Earth; spacecraft soft landing systems; and safety systems, fire and explosion prevention systems for payload carriers and boosters.

Address:
47 Nepokorennnykh Prospect
St. Petersburg
Russia 195256
Email: secret@niitm.spb.ru

Novator (NII)

FGUP NII Novator

Novator Scientific Research Institute and Pilot Production Plant, Federal State Unitary Enterprise

In September 1998, to facilitate implementation of the Federal Space Programmes, the Novator Technical Centre affiliate was set up at Plesetsk Cosmodrome. NII Novator focuses its activities on the operation and maintenance of computer systems at Plesetsk Cosmodrome; the design & manufacture of test equipment; and the manufacture of spacecraft equipment.

Address:
35 Nedelina St.
Mirny City
Archangel Region
Russia 164170
Email: novator@atnet.ru

Novator

ЗАО Новатор

Novator, Closed Joint Stock Company

Novator specialises in the production of spacecraft control systems; 11N6392, 17N321, 17N35 and 17N41 spacecraft test complexes; climatic chambers and vibration tables for spacecraft testing; and, dry film photo protective resistors for printed circuit board manufacturing.

Address:
1 Panfilova St.
Istra-2 City
Moscow Region
Russia 143500

NPO IT
FGUP NPO IT

Scientific and Production Association for Measurement Technology, Federal State Unitary Enterprise

The Association is the leading enterprise of the Russian space-rocket industry in the creation of telemetry systems for space-rocket hardware. The Association's research themes include data acquisition, transmission, reception and processing.

Address:
2 Pionerskaya St.
Korolyov City
Moscow Region
Russia 141070
Email: npoit@mail.ru

NPO Mashinostroeniya
FGUP NPO Mashinostroyeniya – FNPTs

Research & Production Association of Machine-Building – Federal Scientific and Production Centre, Federal State Unitary Enterprise

The Centre began to design military hardware in 1944 under the direction of V.N. Chelomei at the design bureau of unmanned aerial vehicles. Since the 1960s the enterprise has been working on the universal intercontinental ballistic missile complexes, heavy payload carriers and space-borne systems for a variety of purposes. In addition to this the Enterprise is now working on cruise missile complexes and on sustaining IBM complexes in combat readiness.

Address:
33 Gagarina St.
Reutov City
Moscow Region
Russia 143966
Email: fnpc@npomash.ru

NPO PM
FGUP NPO PM

Academician M.F. Reshetnyov Scientific and Production Association of Applied Mechanics, Federal State Unitary Enterprise

In 1964 NPO PM made and launched its first space-rocket hardware: a light payload carrier and small low-orbit satellites of the Cosmos series. Since then it has successfully designed, deployed in orbit and operated over 1000 satellites. In 1961 the enterprise acquired the status of an independent design bureau ¹ 10 (OKB_10 or KBPM). In 1977 it was transformed into the Scientific and Production Association of Applied Mechanics, which comprised the biggest specialised design bureau and a factory providing for the full cycle of R&D, experimental manufacturing, and the production and operation of satellites. In 1967, on the basis of Molniya-1

satellites manufactured by the enterprise, the first nationwide continuously operating Orbita satellite communication and TV broadcast system was deployed. Subsequently NPO PM created more than 30 space-borne systems and remains the leading Russian supplier of 'turn-key' satellite constellations for navigation and telecommunication satellites for all major types of orbits — from low circular to highly elliptical and geostationary.

Address:
52 Lenina St.
Zheleznogorsk-2 City
Krasnoyarsk Region
Russia 662972
Email: arefina@npo_pm.krasnoyarsk.su

NPOA

FGUP NPOA

Scientific and Production Association of Automatics, Federal State Unitary Enterprise

NPOA specialises in the development of rocket guidance technologies including celestial correction and satellite positioning, synthesis of navigational, aiming and angular stabilisation algorithms; guidance process mathematical modelling; the design and manufacture of radio-electronic and rocket guidance systems; the design and manufacture of onboard computers; and operational support.

Address:
145 Mamina_Sibiryaka St.
Ekaterinburg City
Russia 620075
Email: system@oper.avt.e-burg.ru
Http://www.npoa.sky.ru

NPOE

FGUP NPOE

Scientific and Production Association of Electrical Engineering, Federal State Unitary Enterprise

NPOE is involved in the design, development and manufacture of: inertial navigation systems; angular and linear motion sensors for the control systems of launch vehicles; cruise missiles and spacecraft; electro-mechanical sensors and their actuators; control gyroscopes for aeroplanes and helicopters; gyroscopes for navigation systems of unmanned submarines; automated control systems and precision mechanical gyroscope testbeds; development and introduction of advanced gyroscope technologies; theoretic research in all the above areas and the drafting of technical documentation.

Address:
31 Mendeleyeva St.
Miass City
Chelyabinsk Region
Russia 456320
Email: root@npoe.miass.chel.su

ONIITM

FGUP ONIITM

Omsk Scientific Research Institute for Engineering Technology, Federal State Unitary Enterprise

The Institute provides technological support for the production of space-rocket hardware such as: the design, development and manufacture of hydraulic and gas line cleansing and decontamination equipment; automated fluid purity control equipment for spacecraft and rockets; research into the non-disruptive fluid purity control technology applicable to vacuum fuelling of spacecraft and rockets; and the design, development and manufacture of loading and transportation equipment, and storage facilities.

Address:
Omsk,21
Russia 644021
Email: oniitm@mail.ru

OPTECS

FGUP NPP OPTECS

Optical and Electronic Complexes and Systems — Scientific and Production Enterprise, Federal State Unitary Enterprise

OPTECS specialises in the manufacture and operation of space-borne and ground-based equipment for satellite monitoring, resource surveillance, mapping and geodesics. At present, in cooperation with TsSKB-Progress, OPTECS is taking part in the creation of the prospective Resource-DK, Resource-01 and other Earth remote sensing satellites.

Since 1999, under technical direction from the M.V. Khrunichev Space Centre, OPTECS has been conducting R&D on Gamma-L and Gamma-Ts panchromatic spectra zonal electro-optic systems and stereo electro-optic terrain mapping systems for Monitor-E satellite. Jointly with Polyot Production Association, OPTECS is now working on a near space, atmosphere and Earth surface monitoring system based on a small satellite and a vast data reception and processing network.

Address:
AO KB-NII Vzlet
4th Zapadny thoroughfare
Zelenograd City
Moscow
Russia 103460
Email: optecs@mail.ru

Orion

FGUP NPO Orion

Orion Scientific and Production Organisation, Federal State Unitary Enterprise

Orion focuses its current activities on the creation of space complexes, communication systems and data processing centres; the design, development, deployment of high-speed telecommunication equipment and software for global, corporate and local communication networks; data transmission using ATM/B-ISDN technologies, including space and ground segments; and, the design and operation of spacecraft ground control and ballistic flight support complexes.

Address:
7 Oktyabrskaya St.
Krasnoznamensk City
Moscow Region

Russia 143090
Email: orion1@online.ru

**Pilyugin Centre
FGUP NPTs AP**

Academician N.A. Pilyugin Scientific and Production Centre for Automation and Instrument Engineering, Federal State Unitary Enterprise

This centre has specialised in spacecraft and rocket control, guidance and navigation systems since 1946. The Centre is the prime developer of control systems for Russian launch vehicles, boosters, spacecraft and deep space probes.

During the 1990s the Centre designed and saw through the commissioning phase the control systems for Topol-M fifth-generation missile complexes with unsurpassed tactic and technical parameters. Among its latest designs is a control system for the Sea Launch international facility.

Address:
1 Vvedensky St.
Moscow
Russia 117342
Email: npcap@diaup.ptt.ru

**Planeta
NITs Planeta**

Planeta Scientific Research Centre for Space Hydrology and Meteorology, State Enterprise

Today Planeta is Rosgidromet's leading agency for the operation and development of national constellations of hydro meteorological Meteor and Goms satellites, oceanographic ocean satellites and natural resource surveillance resource satellites. It also plays a leading role in the reception of data from NOAA, METEOSAT, GMS, SPOT, GOES, TOS/Terra, Agua and other foreign satellites. The Centre provides the satellite imagery and data to public services and agencies involved in weather forecasting, environmental monitoring and coping with the natural disasters.

Address:
7 Bolshoi Predtechensky Lane
Moscow
Russia 123242
Email: asmus@planet.iitp.ru
<http://planet.iitp.ru>

**Polyot
FGUP PO Polyot**

Polyot Production Association, Federal State Unitary Enterprise

PO Polyot is involved in the development and manufacture of KOSPAS-SARSAT distress signal relay satellites, GLONASS navigation satellites, communication satellites; manufacture of Cosmos launch vehicles; and, participation in drafting and implementing space research programmes. In addition it is concerned with the development and manufacture of civilian aviation hardware for An-74 multipurpose medium-haul airliner and its modifications, An-3 light multi-purpose plane and its modifications and An-70 military transport plane.

Address:
226 Bogdana Khmel'nitskogo St.
Omsk City
Russia 644021
Email: polyot@polyot.omsk.ru
<http://www.polyot.su/>

Polyus

FGUP NPTs Polyus

Polyus Scientific and Production Centre, Federal State Unitary Enterprise

Polyus specialises in knowledge-intensive onboard and ground electric and mechanical equipment and precision engineering. Devices made by Polyus are found throughout the Russian satellite constellation. They operate onboard the Molniya (Lightning) and Ekran-M (Screen), Gals, Express communication and TV broadcasting satellites, Meteor environmental monitoring satellites, reconnaissance satellites, Mars and Phobos interplanetary stations and others. The enterprise is now working on electric power systems and complexes for the prospective GLONASS, Resource-DK, Yamal-200, -300, small communication satellites and Phobos-Ground interplanetary probe. Among the new designs are the low-noise AC and DC electric fans.

Address:
2 Kirov Square
Tomsk City
Russia 634050
Email: polus@online.tomsk.net

Prikamskproyekt

ОАО Прикампроект

Prikamsk Institute for Design of Industrial Enterprises, Open Joint Stock Company

Prikamskproyekt focuses its activities on the complex drafting of pre-project and project documentation on industrial enterprises, buildings and installations; technical and economical feasibility studies for construction, expansion, reconstruction and technical modernisation or capital refurbishment of existing enterprises, buildings and installations; drafting of cost sheets and project documentation including design documentation on non-standard equipment for the construction of new or reconstruction and technical modernisation of existing enterprises, buildings and installations for industry, agriculture, social and communal concerns, medical establishments; and, complex lines for the processing of agricultural produce and food manufacturing.

Address:
270 Pushkinskaya St.
Izhevsk City
Udmurt Republic
Russia 426000
Email: ppp@cbs.udm.ru

Primorsky Centre

ОАО Приморский ЦТТ РСК Энергия

Primorsk Scientific and Technical Centre of the S.P. Korolyov Energia Space-Rocket Corporation, Open Joint Stock Company

Primorsky Centre is involved in test-bed development of articles, units and aggregates of space-rocket hardware including firing tests of liquid-propellant rocket engines; testing of general-use industrial equipment; construction of special non-standard stand equipment.

Address:
Primorsk City
Leningrad Region
Russia 188910
Email: pntc@vbq.spb.ru

Priroda

FGUP GosTsentr Priroda

Priroda State Research and Production Centre, Federal State Unitary Enterprise

Today, the Centre's main achievements are the following: participation in the design and operation of Resource-F imaging satellites; participation in the launch of Resource-F satellites; participation in image-taking from onboard the piloted Soyuz spacecraft, Salyut and Mir orbiting space stations; provision of space images and their derivatives to over 1000 organisations belonging to 22 ministries and agencies; drafting a geodata system project for the Russian Government; the design and launch of Priroda-1 automated satellite data processing complex; participation in the development of MK-4, KAP-350, MKF-6M, MKF-6 (airborne model) space-borne cameras; PS-4, SPM-1, SPM-2, Contact, Rektimat-S, PKA-V, PPA-V, MSP-4V, Tract-R, Period and other image-processing equipment, some of it in cooperation with foreign partners; and, the development of satellite cartography technologies and the compilation and publication of a series of up to 30 thematic maps of Stavropol Region, Krasnoyarsk Region, Tver Region, Kalmykiya, Tadjikistan, Uzbekistan, Kirgiziya and Armenia.

Address:
10 Polimernaya St.
Moscow
Russia 111394
Email: adm@priroda.msk.su

Progress

FGUP GNP RKTs TsSKB-Progress

TsSKB-Progress State Research and Production Space Rocket Centre, Federal State Unitary Enterprise

TsSKB and Progress Factory designed and brought into service nine modifications of Vostok, Molniya, Soyuz payload carriers and 26 rocket complexes that have launched about 1700 spacecraft, 900 of which were their own designs.

TsSKB-Progress specialises in design, modernisation, production and delivery within the framework of the Federal space programme and under private contracts for space-rocket complexes and Earth remote sensing systems; scientific research into astrophysics and nuclear physics, microgravity, space materials science, space biology, biotechnology and medicine; launch preparations and conduct, participation in spacecraft flight control; and, the development of spacecraft control technologies, prospective spacecraft control equipment and the related software.

Address:
18 Pskovskaya St.

Samara City
Russia 443009
Email: cscb@mail.samtel.ru

Puskovie Uslugi
ZAO Kompaniya Puskovie Uslugi
Launch Services, Closed Joint Stock Company

Company Puskovie Uslugi focuses its activities on promoting, on the international market, commercial satellite launch services with Start and Cosmos launchers; attracting investment into the space-rocket industry; coordinating work on improving the design of the launchers and their interfaces; and, adapting the infrastructure of cosmodromes to meet the requirements of satellite launch customers.

Address:
10 Berezovaya Alley
Moscow
Russia 127273
Email: complexm@mtu-net.ru
<http://www.puskuslugi.ru/>

RIRT
FGUP RIRT
Russian Institute of Radionavigation and Time, Federal State Unitary Enterprise

RIRT is the leading organisation in the formation of scientific and technical policy on time and coordinate support in the interests of Defence Ministry and economical development. Established in 1957, RIRT designs and manufactures long-range satellite radio navigation, universal time and synchronisation systems, conducts systemic studies and drafts programmes for the further development, standardisation and unification of these systems.

Address:
2 Rastrelli Sq.
St. Petersburg
Russia 193124
Email: office@rirt.ru
<http://www.rirt.ru>

RNII KP
FGUP RNII KP
Russian Scientific Research Institute of Space Instrument Engineering, Federal State Unitary Enterprise

This institute, established in 1946, has become one of the pioneer enterprises of the Russian space industry. It has unique experience in development, production, operation and maintenance of multifunctional space and ground-based systems. The high-skilled staff of the enterprise has preserved its innovative corporate spirit and the cutting-edge sophistication of its developments. The control systems, devices and equipment developed by the Institute are renowned for their high level of reliability.

Address:
53 Aviamotornaya St.

Moscow
Russia 111250
Email: contact@rniikp.ru
<http://www.rniikp.ru>

Rosobshchemash

ОАО Корпоратива Рособшchemash

Rosobshchemash Corporation, Open Joint Stock Company

Rosobshchemash organise the warranty for, and supervise the production of, combat missiles, and space-rocket and naval strategic missile complexes; organise and conduct work on industrial facilities for the use and liquidation of stationary and railway-based missile complexes including demilitarisation of IBM bases; draft demilitarisation programmes; and, organise international partnerships, work support, technical follow-up and control.

Address:
7 S. Makeyeva St.
Moscow
Russia 123100

Saturn

GP Organizatsiya Saturn

Saturn Organisation, State Enterprise

Saturn Organisation is involved in research and the refinement of methods of fine polishing and strain hardening the components of liquid propellant rocket engines and their assembly.

Address:
22 Voroshilova St.
Voronezh City
Russia 394006
Email: gpo-saturn@vmail.ru

SaturnSC

ОАО Saturn

Saturn, Open Joint Stock Company

Saturn's main activities lie in the field of the design, development and manufacture of solar panels, and the nickel-hydrogen accumulator batteries for spacecraft. They also test and check equipment (KPA BS, KP AB).

Address:
6 Solnechnaya St.
Krasnodar City
Russia 350072

Sovinformspudnik

ZАО Sovinformspudnik

Sovinformspudnik, Closed Joint Stock Company

Sovinformspudnik is mainly involved in the dissemination on the internal and external markets of high-resolution (2 m and better) satellite images and stereoscopic topographic images with 10 m

resolution; conducting satellite imaging; satellite data processing; and, using satellite imagery to compile topographic, digital and thematic maps also incorporating other data and updating existing maps.

Address:
47 Leningradsky Highway
Moscow
Russia 125167
Email: common@sovinformsputnik.com
<http://www.sovinformspuutnik.com>

Space Simulators
Centre for Space Simulator-Building and Personnel Training

The Centre for Space Simulators develops and constructs spacecraft simulators (Mir orbiting space station, ISS, Soyuz-TM transport ship); creates computer graphics and virtual reality systems; integrates computer data gathering and processing systems of simulator complexes; creates systems of medical, psychological and physiological control over dynamic system operators; and provides operational support for the created simulators.

Address:
6 Leninsky Prospect
Moscow
Russia 117049
<http://www.asrdc.tpark.ru>

SPS
FGUP SPS
Siberian Instruments and Systems, Federal State Unitary Enterprise

SPS specialises in the manufacture of command instruments and electromechanical actuators for spacecraft control, orientation and stabilisation systems, multi-layer printed circuit boards, micro-assemblies and their electronic equipment.

Address:
2 Kharkovskaya St.
Omsk City
Russia 644041
Email: Sibpribor@au.ru

SPZ
FGUP SPZ
Sosensky Instrument-Building Factory, Federal State Unitary Enterprise

This Factory specialises in the serial production of space-rocket control systems.

Address:
Sosensky Town
Kozelsky District
Kaluga Region
Russia 249711

Email: spz@kaluga.ru
<http://www.spzavod.ru>

Technomash
FGUP NPO Technomash

Technology Engineering Research and Production Association, Federal State Unitary Enterprise

The Technomash Association is the leading enterprise of the Federal Space Agency in implementing the Federal Space Programme in the area of technology, and participates in the state scientific and technical programmes of the industry and the Ministry of Defence.

It is a leading scientific and technological organisation of the Russian Federation in the area of space-rocket technologies and solving complex problems of design, development and serial production of practically all articles of space-rocket hardware, as well as consumer goods produced with conversion technologies. Their work encompasses all major engineering technologies from prefabrication to functional testing, from non-destructive testing and measurement support to standardisation and certification of technologies, industrial equipment and production articles.

Address:
40 the 3rd Marinoj Roshchi Lane
Moscow
Russia 127018
Email: technomash@mtu-net.ru
<http://www.mtu-net.ru/technomash>

TsENKI
FGUP TsENKI

Centre for Operation of Space Ground-Based Infrastructure, Federal State Unitary Enterprise

FGUP TsENKI is a commercial organisation subordinated to the Russian Aerospace Agency. Its main purpose is the provision of launch services and the conduct of scientific research and experimental manufacturing works for the organisation, operation and further development of the space ground-based infrastructure of the Russian Federation.

Address:
42 Shchepkina St.
Moscow
Russia 107996
Email: tsenki@rosaviakosmos.ru
<http://www.tsenki.com>

TsKB TM (Heavy Engineering)
FGUP TsKB TM

Heavy Engineering Central Design Bureau, Federal State Unitary Enterprise

TsKB focuses its main activities on the creation of command and control posts for rocket complexes; the development of stationary and retractable feeders and antennae; the development of launch facilities: service tower erectors, fuelling and draining systems, lifts and special hoists, protective devices and other equipment; development of deformation shock absorbers; manufacture of experimental specimens; and the design supervision over construction, set up and testing of equipment and the launch sites.

Address:
12a Podyomnaya St.
Moscow
Russia 111024
Email: heavyeng@Cityline.ru

TsKB TM (Transport Engineering)

FGUP TsKB TM

Central Design Bureau of Transport Engineering, Federal State Unitary Enterprise

TsKM is involved in scientific research, experimental engineering, and the manufacture of experimental specimens, and the testing, serial production, repairs, maintenance, utilisation, producer and warranty supervision of the following hardware: components of space-rocket complexes, in particular railway-based and other aggregates for transportation and storage of space-rocket hardware under specified temperature and humidity; transportation and erection equipment for launch facilities; railway-based power-stations; some types of fuelling systems and aggregates of technical and launch facilities; and other aggregates and equipment intended for use in space hardware; various types of military, dual-use and special-purpose railway rolling stock; industrial equipment, social and economic produce; and the preliminary commissioning and certification trials of railway rolling stock and its components.

Address:
45-V Petersburg highway
Tver City
Russia 170003
Email: ilckbtm@tvcom.ru

TsSKT

ZAO TsSKT

Space-Rocket Hardware Certification Centre, Closed Joint Stock Company

TsSKT specialises in scientific and technical expertise; the certification of space-rocket hardware, services and quality control systems; participates in tests; evaluates space-rocket hardware compliant with the requirements of technical documentation; organises cooperation between certification agencies and test centres (laboratories); the preparation and accreditation of certification agencies and test centres (laboratories); attestation of experts; creation and perfection of FSS KT; supervision over certified produce, accredited certification agencies and test centres (laboratories); and, drafts and refines normative documentation on certification and scientific-technical expertise.

Address:
4 Pionerskaya St.
Korolyov City
Moscow Region
Russia 141070

TsNII RTK

GNTs RF TsNII RTK

Central Scientific Research and Experimental Engineering Institute of Robotics and Technical Cybernetics, State Research Centre of the Russian Federation

TsNII RTK specialises in robotics and control systems; photon technologies; special-purpose instrument-building; laser technologies; telenetics. Scientific R&D in robotics and technical cybernetics is carried out in the following: development of the robotic arms and systems, including those that use shape memory alloys, for space and other highly demanding applications; creation of test facilities for these; development of advanced control systems relying on new physical principles and intended for use in spacecraft, aircraft, ships, sea-based oilrigs and other industrial installations; development of spacecraft attitude control and housekeeping systems.

Address:
21 Tikhoretsky Prospect
St. Petersburg
Russia 194064
Email: vlopota@neva.ru

TsNIIMash

FGUP TsNIIMash

Central Scientific Research Institute of Machine-Building, Federal State Unitary Enterprise

TsNIIMash is responsible for the systemic analysis, R&D on, and drafting of, space-rocket hardware development programmes and Russia's national space programmes, the solution of scientific and technologic problems in aero-gaseodynamics, heat and mass exchange, structural strength, dynamics, standardisation and unification of space-rocket systems, and mission control over spacecraft and orbiting space stations.

Address:
4 Pionerskaya St.
Korolyov City
Moscow Region
Russia 141070
<http://www.tsniimash.ru/>

Urals Composite

FGUP UNIIKM

Urals Scientific Research Institute of Composite Materials, Federal State Unitary Enterprise

UNIIKM is a multi-profile scientific and production enterprise specialising in the introduction of new composite materials into space-rocket hardware. The Enterprise carries out full production cycle from the creation of materials to the fabrication of the articles, together with technology development and the design and manufacture of the industrial equipment.

Address:
57 Novozvyaginskaya St.
Perm City
Russia 614014

Vavilov Optics

GUP VNTs S.I.Vavilov GOI

All-Russian Scientific Centre – S.I. Vavilov State Optical Institute, State Unitary Enterprise

This Institute carries out fundamental and applied research into various areas of optics and the related sciences, among which: optical materials, photo physics, information optics, computer

optics, iconic, IR technology, thermal vision, laser positioning, aerospace optics, hydro-optics and environmental optics; the design, development and launch into serial production of advanced optical instruments and their components: optical materials, thin films and coatings, optical elements with specified properties; space endurance testing of optical materials, elements and instruments. The Centre has designed and manufactured many space-borne opto-electronic systems and their elements, which have 3-5 year orbital lives and are intended for the positioning and identification of light sources, Earth remote sensing, space survey in UV, visible and IR wavebands.

Address:
12 Birzhevaya Liniya
St. Petersburg
Russia 199034

**Vernadsky Institute
GEOKhI RAN**

V.I. Vernadsky Institute of Geochemistry & Analytical Chemistry at the Russian Academy of Sciences

This Institute is the acknowledged leader in geochemistry, astrochemistry, comparative planetology and analytical chemistry. Vernadsky Institute is involved in scientific inquiry into the formation and evolution of the planetary and small-body substance in the solar system; elaboration on the theoretical basis of the comparative planetology; and, research into the evolution of the planetary surfaces through direct and remote sensing methods. In addition it is; also concerned with the compilation of geomorphic and geologic maps of various scales; advancement in the methods of analysis of physical and chemical properties and elementary composition of the planetary rocks and atmospheres; investigation into the internal structure of the planets; and, the construction of the analytical instruments for fly-by and orbiting spacecraft, landing probes and penetrators.

Address:
19 Kosygina St.
Moscow
Russia 119991
Email: geokhi.ras@relsom.ru
<http://www.geokhi.ru>

**VKB RKK Energia
ZAO VKB RKK Energia**

Volga Design Bureau of S.P. Korolyov Energia Space-Rocket Corporation, Closed Joint Stock Company

VKB's main activities consist in drafting design documentation and assistubg in the construction of heavy payload carriers at factories in the Samara Region and at the Samara-based affiliate of the Progress factory, and the mathematical and experimental structural strength verification at any level of design complexity.

Address:
18-B Pskovskaya St. Bldg. 8
Samara City
Russia 443077
Email: vkb@info-net.ru

VMZ
FGUP VMZ

Voronezh Mechanical Plant, Federal State Unitary Enterprise

Voronezh Mechanical Plant is a unique manufacturing complex that carries out the full technologic cycle of design, development and serial production of liquid-propellant rocket engines and various industrial equipment. Voronezh Mechanical Plant specialises in the production of liquid-propellant rocket engines, aircraft piston engines, and oil and gas extraction equipment.

Address:
22 Voroshilova St.
Voronezh City
Russia 394055
Email: mail@vmz.vsi.ru

VNIEM
FGUP NPP VNIEM

A.G. Iosiphyan Scientific Research and Production Enterprise – All-Russian Scientific Research Institute of Electro mechanics with and Experimental Production Facility, Federal State Unitary Enterprise

NPP VNIEM conducts scientific research into, and experimental engineering on, the onboard equipment for piloted space stations. NPP VNIEM is the creator of the automated spacecraft of Meteor, Resource-O and Electro series intended for hydrometeorology, study of the Earth's resources and environmental monitoring.

Address:
4 Khoromny Blind Alley
Moscow
Russia 101000
Email: vniem@orc.ru, vniem@online.ru
<http://www.vniem.ru>

Votkinsk Plant
FGUP Votkinsky Zavod

Votkinsk Plant State Production Association, Federal State Unitary Enterprise

Votkinsk Plant specialises in the production of strategic and medium-range ballistic missiles and the production of the Start payload carriers.

Address:
2 Kirova St.
Votkinsk City,
Udmurt Republic
Russia 427430

Vympel
FGUP OKB Vympel

Vympel Experimental Design Bureau, Federal State Unitary Enterprise

OKB Vympel is involved in the design, construction and modernisation of space rocket launch facilities; the design, construction of launch pad pneumatic, hydraulic and elastic cushions, thermal stabilisation systems, control and power supply systems for Proton and other payload carriers; design, construction of carrier and payload pre-launch test facilities, lifting and transportation equipment; operation of technical facilities at the Baikonur Cosmodrome; and carrier and payload pre-launch testing at Baikonur, Plesetsk and Svobodny cosmodromes.

Address:
7 Tkatskaya St.
Moscow
Russia 105318

Vympel (MAK)
ОАО МАК Vympel
Vympel Interstate Stock Corporation, Open Joint Stock Company

Vympel is involved in theoretical and experimental research into the near-Earth environment; validation of the main directions of development of space research control systems; theoretic research into, and experimental development of, space structures; creation of objects and mathematical support of space control systems; and, the experimental development and manufacture of equipment.

Address:
3 Vosmogo Marta 4th St.
Moscow
Russia 125319
Email: vimpel@vimpel.ru

ympel (MMZ)
ОАО MMZ Vympel
Moscow Vympel Engineering Plant, Open Joint Stock Company

Vympel specialises in the design, development and production of: piloted orbital complexes; spacecraft simulators (production); ground infrastructure for spacecraft launch and operation, data processing equipment and systems; stands (junction and turning devices, solar panel deployment devices, cross beam covering devices, assembly and full-scale test stands); and, sets for pneumatic, hydraulic and hermetic testing, among them fuel tank pressurisation, filling and drainage testing, etc.

Address:
34 Velyaminovskaya St.
Moscow
Russia 105318

ZMZ
ФГУП ПО ЗМЗ
Zlatoust Engineering Plant Production Association, Federal State Unitary Enterprise

Zlatoust Engineering Plant was founded in 1939 as a small arms manufacturer. During World War II and afterwards it mass-produced a vast variety of weaponry including Volkov-Yartsev aircraft guns, Maxim machine guns, Degtyarev anti-tank rifles, Gorbunov machine-guns and

PKT tank machine-guns. In 1955 the factory began to make space-rocket hardware as well as defence equipment.

Address:
1 Parkovy lane
Zlatoust City
Chelyabinsk Region
Russia 456208
Email: rem-ms@chel.surnet.ru

Zvezda
FGUP Zvezda
Zvezda, Federal State Unitary Enterprise

Zvezda represents a unique industrial complex implementing the full technologic cycle of the creation of modern high-precision gyroscopic devices for space-rocket hardware; it is one of the country's best producers of floating gyroscopes. Zvezda's floating gyroscopes have operated successfully onboard Mir, and now are serving just as well onboard the ISS and the European SESAT communication satellite.

Address:
Solnechny Town
Tver Region
Russia 172739

Zvezda
ОАО NPP Zvezda
Zvezda Scientific and Production Enterprise, Open Joint Stock Company

Zvezda's main activities lie in the field of the design and development of personal life support and crew salvation systems for all kinds of flight vehicles including: altitude and protective equipment, oxygen equipment; ejection and amortisation seats; spacesuits with autonomous life support systems and space mobility thrusters; prevention or alleviation of the consequences of prolonged exposure to weightlessness (load and vacuum suits); oxygen supply systems; airliner evacuation and passenger salvation systems; and, airborne fire detection and extinguishing equipment.

Address:
39 Gogolya St.,
Tomilino Village
Moscow Region
Russia 140070
Email: zvezda@zvezda-npp.ru

Technical and Engineering Universities of Russia
http://aeer.cctpu.edu.ru/engn/db_vuz/tvuz_main.phtml?pback=http://aeer.cctpu.edu.ru

Administration of St. Petersburg
Committee for economic development, industrial policy and trade
Voznesenskiy pr., 16
190000 St. Petersburg
Russia

Tel.: (812) 570 30 15

Fax: (812) 570 36 22

cedipt@gov.spb.ru

<http://www.gov.spb.ru/>

<http://www.cedipt.spb.ru/>

Contact person: [BYKOV Dmitry Vyacheslavovich](#)

Position: Deputy Chairman

**St. Petersburg Foundation
for SME Development**

14, Izmaylovsky prospect

190005 St. Petersburg

Russia

Tel.: +7 812 325 8351, 575 0480

Fax: +7 812 712 6607

info@fbd.spb.ru

<http://www.fbd.spb.ru/>

Contact person: [Maxim Balaney](#)

Position: Senior consultant

The Russian High-Tech Development Fund

24/1, Petrovka St., 103051 Moscow, Russia

Phone/Fax: (095) 200-2631

Phone: (095) 954-9990

Fax: 954-5008